

**STATEMENT OF BASIS (AI No. 12754)**

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0093955 to discharge to waters of the State of Louisiana.

**THE APPLICANT IS:** Pathfinder Energy Services, Inc.  
3329 West Pinhook Road  
Lafayette, Louisiana 70508

**ISSUING OFFICE:** Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services  
Post Office Box 4313  
Baton Rouge, Louisiana 70821-4313

**PREPARED BY:** Michelle Bickham

**DATE PREPARED:** March 13, 2008

**1. PERMIT STATUS****A. Reason For Permit Action:**

Permit reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

**B. NPDES permit - N/A**

NPDES permit effective date: N/A

NPDES permit expiration date: N/A

**C. LPDES permit - LA0093955\***

LPDES permit effective date: December 1, 2002

LPDES permit expiration date: November 30, 2007

\*This permit was issued under AI39116 which is also for Pathfinder Energy Services, Inc.

**D. Date Application Received: October 3, 2007****2. FACILITY INFORMATION****A. FACILITY TYPE/ACTIVITY - oilfield service company**

Pathfinder Energy Service, Inc. is an existing oilfield service company which rents, cleans, and maintains oilfield equipment.

**B. FEE RATE**

1. Fee Rating Facility Type: minor

2. Complexity Type: II\*\*

3. Wastewater Type: III

4. SIC code: 1389

\*\*This facility has an SIC code of 1389 and a complexity type of II with a corresponding 10 point rating. However, because only sanitary wastewater

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and stormwater runoff are being discharged from the facility, the points have been BPJ'ed to 0.

C. LOCATION - 130 Beau Pre Road, Lafayette, Lafayette Parish  
 Latitude 30°10'18", Longitude 91°59'24"

### 3. OUTFALL INFORMATION

#### Outfall 001

Discharge Type: treated sanitary wastewater  
 Treatment: sewage treatment plant including aeration, filtration, chlorination  
 Location: at the point of discharge from the sewage treatment plant located on the southeast corner of the facility (Latitude 30°10'40", Longitude 92°00'02")  
 Flow: 2500 gpd  
 Discharge Route: local drainage thence to Coulee des Poches thence to the Vermilion River

#### Outfall 002

Discharge Type: treated sanitary wastewater  
 Treatment: sewage treatment plant including aeration, filtration, chlorination  
 Location: at the point of discharge from the sewage treatment plant located on the northeast corner of the facility (Latitude 30°10'43", Longitude 92°00'02")  
 Flow: 2060 gpd  
 Discharge Route: local drainage thence to Coulee des Poches thence to the Vermilion River

### 4. RECEIVING WATERS

STREAM - local drainage thence to Coulee des Poches thence to the Vermilion River

BASIN AND SEGMENT - Vermilion-Teche River Basin, Segment 060801

DESIGNATED USES - a. primary contact recreation  
 b. secondary contact recreation  
 c. propagation of fish and wildlife  
 D. agriculture

### 5. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale below.

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Changes from previous permit: The monitoring frequency for Outfalls 001 and 002 has been reduced to 1/6 months.

## 6. COMPLIANCE HISTORY/COMMENTS

### A. Compliance History

There have been no recent inspections done at the facility.

### B. DMR Review/Excursions

DMR's have been submitted in accordance with the existing permit. One exceedance was found as follows:

| <u>Date</u> | <u>Parameter</u> | <u>Outfall</u> | <u>Reported Value</u> | <u>Permit Limits</u> |
|-------------|------------------|----------------|-----------------------|----------------------|
| 4/07        | BOD              | 001            | 64 mg/L               | 45 mg/L              |

## 7. EXISTING EFFLUENT LIMITS

Outfalls 001 and 002 - treated sanitary wastewater

| Parameter      | LPDES                          |                                 |
|----------------|--------------------------------|---------------------------------|
|                | Monthly Average                | Weekly Average                  |
| Flow - gpd     | Report<br>1/mo<br>Est.         | Report<br>1/mo<br>Est.          |
| BOD            | ---                            | 45 mg/L<br>1/mo<br>Grab         |
| TSS            | ---                            | 45 mg/L<br>1/mo<br>Grab         |
| Fecal Coliform | ---                            | 400 col./100 mL<br>1/mo<br>Grab |
| pH             | 6.0 - 9.0 s.u.<br>1/mo<br>Grab |                                 |

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#### **8. ENDANGERED SPECIES**

The receiving waterbody, Subsegment 060801 of the Vermilion-Teche River Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

#### **9. HISTORIC SITES**

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

#### **10. TENTATIVE DETERMINATION**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

#### **11. PUBLIC NOTICES**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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#### Rationale for Pathfinder Energy Services, Inc.

1. Outfalls 001 and 002 - treated sanitary wastewater (estimated flow is:  
 Outfall 001 - 2500 gpd and Outfall 002 - 2060 gpd)

| <u>Pollutant</u> | <u>Limitation</u><br>Mo. Avg:Weekly Avg<br>(mg/l) | <u>Reference</u>               |
|------------------|---|--------------------------------|
| Flow             | Report:Report                                     |                                |
| BOD <sub>5</sub> | ---:45 mg/L                                       | LPDES General Permit LAG530000 |
| TSS              | ---:45 mg/L                                       | LPDES General Permit LAG530000 |
| Fecal Coliform   | ---:400 col/100mL                                 | LPDES General Permit LAG530000 |
| pH               | 6.0 - 9.0 s.u.                                    | LPDES General Permit LAG530000 |

**Treatment:** sewage treatment plant including aeration, filtration, and chlorination

**Monitoring Frequency:** 1/6 months for all parameters at the point of discharge from the sewage treatment plants. NOTE: The monitoring frequency has been reduced to 1/6 months based on a DMR review from the past two years.

**Limits Justification:** LPDES General Permit LAG530000, Schedule B

BPJ Best Professional Judgement  
 su Standard Units

#### NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

#### STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water discharges are not required to be covered under an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 1389 are considered to have storm water discharges associated with industrial activity.

The SWP3 shall be prepared, implemented, and maintained within (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in the storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).

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### 303(d)/TMDL WATERBODIES

Subsegment 060801, is not listed on LDEQ's Final 2006 303(d) list as impaired. However, subsegment 060801 was previously listed as impaired for phosphorus, nitrogen, organic enrichment/low DO, pathogen indicators, suspended solids/turbidity/siltation, and carbofuran for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to establish TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for Segment 060801:

#### Carbofuran

The TMDL for Carbofuran in the Mermentau and Vermilion Teche River Basins was final on March 21, 2002. No allocation was given to point source discharges in the Vermilion Teche River Basin. According to the TMDL, there is only one point source in the Vermilion Teche (FMC Corp. LA0064360). In addition, this facility has no potential to discharge Carbofuran. Therefore, requirements for Carbofuran will not be placed in this permit.

#### Nitrogen/Phosphorus

The TMDL for Dissolved Oxygen and Nutrients in the Vermilion River was final on April 5, 2001. No allocation was given to point source discharges in the Vermilion Teche River Basin. LDEQ's position on nutrients, as supported by the ruling in *Sierra Club v. Givens*, 710 So.2d 249 (La. App. 1st Cir. 1997), writ denied, 705 So.2d 1106 (La. 1998), is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. LAC 33:IX.2707.D.1.f.iii allows the establishment of effluent limitations based on an indicator parameter for the pollutant of concern. LDEQ's consistent approach to controlling nutrients where the WQMP does not otherwise require specific nutrient limitations is achieved by limiting the discharge of oxygen-demanding substances through a BOD<sub>5</sub> limitation. Compliance with the BOD<sub>5</sub> limitation (placed on Outfalls 001 and 002) as the indicator parameter will result in the control of nutrients from the discharge sufficient to attain and maintain the applicable water quality standard. Effluent monitoring of the indicator parameter as conducted by the permittee in accordance with the effluent limitation requirements of the permit in addition to LDEQ's ambient water quality monitoring program will allow for further evaluation by the Department to determine the effectiveness of the limitation. The reopener clause in the permit allows the Department to modify or revoke and reissue the permit if the limitations as set on the indicator parameter are shown to no longer attain and maintain applicable water quality standards.

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Suspended solids/turbidity/siltation

As per the TMDL for TSS, Turbidity, and Siltation for the 15 Subsegments in the Vermilion River Basin, point source loads are so small as to be insignificant, and because effective policies are in place to limit TSS discharges, no specific reductions from point sources are required. Standard TSS limitations have been established for Outfalls 001 and 002.

Organic Enrichment/Low DO

Per the EPA's Vermilion River Dissolved Oxygen and Nitrogen TMDL, the limits apply to sanitary discharges, and process outfalls of food processors and seafood processors. For discharges less than 25,000 GPD, secondary limits shall apply as per the TMDL. The organic enrichment/low DO impairment shall be addressed through the BOD<sub>5</sub> parameter for Outfalls 001 and 002.

Pathogen Indicators

Per The Vermilion River Fecal Coliform TMDL, there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL. The pathogen indicators impairment shall be addressed through the standard fecal coliform limitations established for Outfalls 001 and 002.